

Interstate 595 Project Development & Environment (PD&E) Study Public Hearing

INTERSTATE

595

I-595 PD&E STUDY

I-595 from the I-75 Interchange
to the I-95 Interchange

FM No.: 409354-1-22-01

FAP No.: 5951 539 I



Florida Department of Transportation
District Four



Date: November 29th, 2005

Location: Renaissance Plantation Hotel
1230 South Pine Island Rd., Plantation, FL 33324

Agenda: 6:00 Open Forum
7:15 Formal Presentation
7:35 Public Comment Period

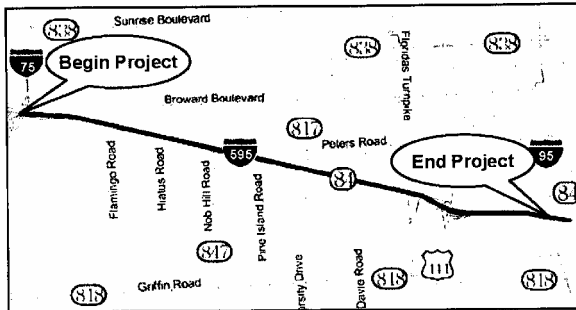


Introduction

The I-595 Master Plan Study was initiated in 1994 with the purpose of developing improvements for I-595 in Broward County and to address the future mobility needs of the corridor. As part of the Master Planning process, a Locally Preferred Alternative (LPA) was developed and approved by the Federal Highway Administration (FHWA) and Broward County. In the summer of 2003, the Florida Department of Transportation (FDOT) initiated the I-595 Project Development and Environment (PD&E) Study. Since this time, the FDOT has been working to update, evaluate, and further define the preferred alternative.

As we are nearing the end of the PD&E Study, the purpose of this Public Hearing is to solicit comments regarding a preferred alternative. All public comments received will be reviewed and evaluated. Approval from the FHWA for this project is expected in the Summer of 2006. Following approval from FHWA, the project will move forward into the Final Design Phase.

The project limits for this PD&E Study extend from the I-75/Sawgrass Expressway interchange to I-95. This 13-mile corridor includes a parallel frontage road system provided by SR 84. Major system connections include the I-75/Sawgrass Expressway, Florida's Turnpike, SR 7 (US 441), and I-95 interchanges.



Study Objectives

There are four primary objectives to the I-595 PD&E Study:

1. **Update the Locally Preferred Alternative (LPA)** so that a system alternative is carried forward that maximizes the potential of the I-595 corridor while minimizing impacts to surrounding communities.
2. **Satisfy the National Environmental Policy Act (NEPA) Process** so Federal Funds can be used for the project.
3. **Develop a reasonable phasing plan** for individual project element implementation.
4. **Coordinate with other ongoing project efforts** that influence the I-595 corridor, including the Central Broward East-West Transit Alternatives Analysis, Florida's Turnpike Mainline Widening projects, and Broward County Greenways.

Due to the complexity of the I-595 project, the FDOT wanted to ensure all proposed improvements were realistic and could be successfully implemented. Refinement of the LPA has gone through an extensive Value Engineering/Design Review (VE/DR) process. The objectives of these reviews were to find the optimum blend of improvements for scheduling, performance, constructability, environmental awareness, safety, and cost effectiveness.

Alternatives

As part of the VE/DR process, four alignment alternatives were developed for the I-595 corridor. These alternatives were evaluated and analyzed. Two alternatives were eliminated from further consideration. **Alternatives 1B and 2A** were further developed and evaluated and will be presented at tonight's Public Hearing. Each alternative evaluated in the VE/DR process provides a combination of concepts from the study process that best meet the overall transportation needs. The most extensive improvements are proposed between SW 136th Avenue and the I-95 interchange. The following components are **general improvements** common to all alternatives:

- **Reversible lanes serving express traffic between I-75/Sawgrass Expressway and east of SR 7**
- **Continuous connection of SR 84 between Davie Road and SR 7**
- **Collector/distributor system (I-95 to Davie Road)**
- **Two lane off-ramps as needed:**

Westbound Direction		Eastbound Direction	
Off-Ramps	On-Ramps	Off-Ramps	On-Ramps
University Drive Pine Island Road Nob Hill Road Hiatus Road	Pine Island Road	Pine Island Road University Drive	University Drive

- **Braided Ramps:**

Westbound Direction		Eastbound Direction	
Between University Drive Pine Island Road Hiatus Road	And Pine Island Road Nob Hill Road Flamingo Road	Between Flamingo Road Nob Hill Road	And Hiatus Road Pine Island Road

- **Overpasses or Flyovers:**

Westbound Direction	Eastbound Direction
Hiatus Road	Hiatus Road Pine Island Road

- **Transit System (evaluated under separate study)**
- **Intelligent Transportation System (ITS)**

In Accordance with Title VI & VIII

In accordance with Title VI and VIII, public participation at this hearing is solicited without regard to race, color, religion, sex, age, national origin, handicap, or familial status. Persons wishing to express their concerns relative to adherence to Title VI and VIII may do so by contacting either:

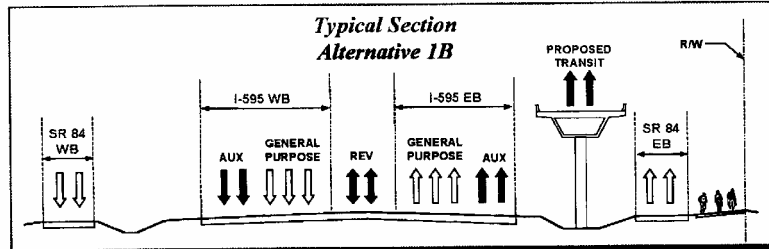
- **Florida Department of Transportation, District Four Title VI and VIII Program Office**
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421
- **Florida Department of Transportation Minority Programs Office**
605 Suwannee Street
Room 260, M.S. 65
Tallahassee, Florida 32399-0450

Alternative 1B

Alternative 1B includes all the general improvements with the addition of the following:

- Two reversible lanes in the median at grade
- Potential transit system located between SR 84 and I-595 in available areas

Note: Noise abatement to be determined.
Transit to be completed under separate study.

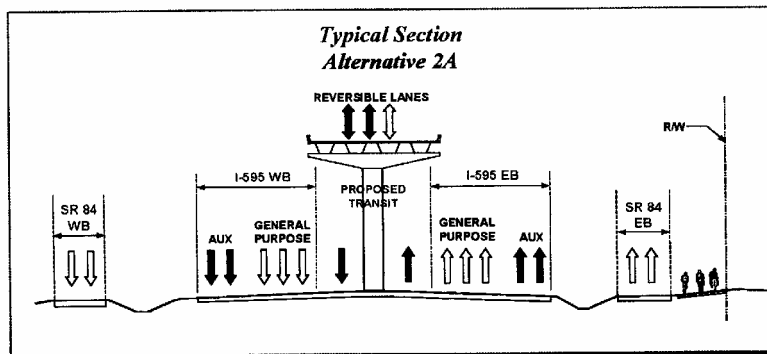


Alternative 2A

Alternative 2A includes the general improvements with the addition of the following elements:

- Three elevated reversible lanes in the median
- Reversible lane direct connection to the Turnpike
- Additional area in the median for a potential transit system or other transportation needs

Note: Noise abatement to be determined.
Transit to be completed under separate study.



Estimated Costs

	Alternative 1B (At-grade Reversible Lanes with Elevated Transit)	Alternative 2A (Elevated Reversible Lanes with At-grade Transit)
CONSTRUCTION COST ESTIMATES		
I-595 Roadway Improvements	(million) \$410.63	(million) \$410.63
Reversible Lanes	\$66.97	\$361.87
Turnpike Projects	\$54.48	\$54.48
Subtotal (Roadway)	\$532.08	\$826.98
Transitway (CBEWTA)	\$514.40	\$323.20
Construction Subtotal	\$1,046.48	\$1,150.18
ENGINEERING & CEI		
Engineering (10%)	\$104.65	\$115.02
CEI (13%)	\$136.04	\$149.52
RIGHT OF WAY COST ESTIMATES		
Roadway/Transit R/W	\$61.34	\$60.45
Drainage Ponds R/W	\$103.00	\$103.00
R/W Subtotal	\$164.34	\$163.45
TOTAL (Corridor)	\$1,451.52	\$1,578.18

Note: These estimates are subject to change and do not include the right of way or construction of the transit stations or drainage considerations for those stations. Transit system to be completed under separate study. Transit costs reflect only CBEWTA components within the I-595 corridor.

Project Schedule

Task / Activity	2004	2005	2006	2007	2008	2009	2010	2011	2012
Public Involvement	◆	◆	★						
Engineering Data Collection and Analysis									
Environmental Data and Analysis									
Final Approval of Recommended Alternatives				▲					
Phased Design & R/W for Recommended Alternative *									
Phased Construction for Recommended Alternative *									

* The preferred PD&E alternative will be broken into multiple projects for design and construction.

◆ Public Meetings
 ★ Public Hearing - 11/29/05
 ■ PD&E Phase

Public Involvement

The purpose of this Public Hearing is to inform and educate you about the project's design features, encourage a positive and open interaction between you and our project team, and address your concerns. We welcome you to share your views, comments, and opinions. All public comments received will be reviewed and evaluated. As a member of this community, your involvement is a vital aspect of the study process. We view you as a member of our study team, and we value your input.

Public Meetings will continue throughout the different phases of this project. Each Public Meeting will contain updates and general information about the project. We invite you to also visit our web site at . . . www.i-595.com.

Public Participation

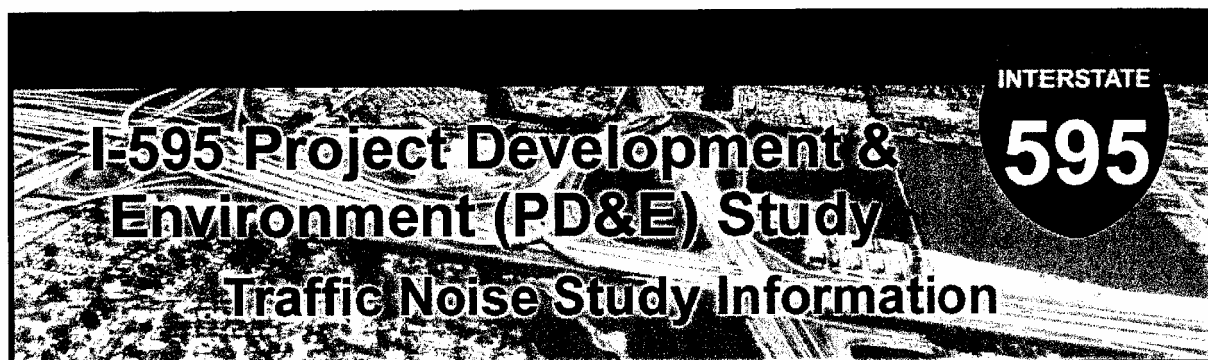
All exhibits, comments and recommendations presented at the public hearing for this project will be entered into the official transcript of the hearing. Written statements may be introduced for the record at the hearing, or they may be filed within twenty days after the hearing. Written comments should be addressed to:



Mr. Paul Lampley, PE

District Project Development Engineer
 Florida Department of Transportation – District Four
 Planning and Environmental Management
 3400 West Commercial Boulevard • Fort Lauderdale, Florida 33309-3421
 Telephone: 954-777-4330 • Email: district4.pd&estudies@dot.state.fl.us

Notes



TRAFFIC NOISE EVALUATION PROCESS AND FREQUENTLY ASKED QUESTIONS

A typical transportation project will go through five phases of development:

- **Planning**
- **Project Development and Environment (PD&E) Study**
- **Final Design**
- **Right of Way**
- **Construction**

The I-595 corridor improvements are currently in the PD&E Study Phase. During the PD&E Study, alignment alternatives are analyzed and a preferred alternative is selected. During the Final Design/Right of Way Phases, the preferred alternative is finalized, right of way needs are determined, and acquisition occurs. During the Construction Phase, the project is built.

The evaluation of traffic noise impacts associated with the project and consideration of noise abatement measures occur during the PD&E Study Phase. Those abatement measures that are determined to be reasonable and feasible are recommended for public input and further consideration during the Final Design Phase. Also, the Florida Department of Transportation (FDOT) commits to construction of reasonable and feasible noise abatement measures at the locations affected by the project, contingent upon further analysis and community input during the Final Design Phase. When final design plans are approximately 60 percent complete, engineering details are sufficient to allow a detailed assessment of an abatement measure. Following this detailed assessment and community input, feasible and reasonable abatement measures are then incorporated into the final design plans. As stated in the FDOT's Noise Wall Policy Statement approved by the Federal Highway Administration (FHWA), feasible and reasonable noise barriers to which the FDOT has committed are to be constructed within five years of the roadway construction letting.

I-595 PD&E Study

From the I-75 Interchange to the I-95 Interchange
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The traffic noise impact study for the I-595 PD&E Study is being performed using methodology approved by the FHWA and includes the following five steps:

Step 1: Identification of Noise Sensitive Sites

A land use survey is conducted to identify noise sensitive sites along the project corridor. Noise sensitive sites are defined as any property (owner occupied, rented or leased) where frequent human use occurs and where a lowered noise level would be of benefit. Typical noise sensitive sites include residences, schools, churches and recreational areas.

Step 2: Determination of Traffic Noise Levels

A computer model is used to predict existing and future traffic noise levels at noise sensitive sites that may be affected by the project. Noise monitoring is conducted at representative sites to validate the model and determine if the computer model is accurately predicting noise levels.

Step 3: Determination of Traffic Noise Impacts

The predicted future traffic noise levels are compared to FHWA's Noise Abatement Criteria. Noise sensitive sites impacted or affected by the project are those subjected to noise levels approaching or exceeding the FHWA Noise Abatement Criteria, or where future noise levels with the project will result in a substantial increase over existing levels. For the typical outdoor noise sensitive site, noise levels approach the Noise Abatement Criteria when predicted levels reach 66 decibels (dBA). A substantial increase is considered to occur when predicted noise levels are 15 dBA or more over existing noise levels as a direct result of the roadway project.

Step 4: Consideration of Noise Abatement Measures

Noise abatement, or noise reduction measures, are evaluated for noise sensitive sites determined to be affected by traffic noise. Abatement measures include



**Florida Department of Transportation
District Four**

TRAFFIC NOISE EVALUATION PROCESS AND FREQUENTLY ASKED QUESTIONS (Continued)

traffic management, alignment modifications, and noise barriers. The evaluation of these measures addresses the feasibility and reasonableness of providing noise abatement. To be considered feasible, the abatement measure must provide at least a 5 dBA reduction to an affected noise sensitive site. Engineering constraints are also reviewed for fatal flaws that will not allow an abatement measure to be implemented.

The evaluation of reasonableness is guided by the FDOT's responsibility to use prudent judgment when considering the expenditure of public funds. Criteria such as desires of the community and public officials, land use stability, antiquity, predicted noise level increases, aesthetics, number of benefited sites and cost are used when evaluating reasonableness.

Step 5: Public Input and Commitments to Abatement Measures

Noise abatement measures determined to be both feasible and reasonable during the PD&E Study are recommended for further consideration and public input. In addition, FDOT makes a commitment to further evaluate these measures during the more detailed Final Design Phase of the project. The recommendations regarding the type, location, and dimension of noise barriers made during a PD&E Study are considered preliminary. The exact dimensions including length and height and type of noise barrier will be determined during the more detailed Final Design Phase and following input from adjacent property owners benefited by the recommended noise barrier. During the early stages of the Final Design Phase, these property owners will be surveyed to determine their desires regarding the type, height, and location of feasible noise barriers or abatement measures prior to FDOT making a final recommendation.

Frequently Asked Questions

What factors affect traffic noise?

Vehicle or traffic noise is a combination of the noises produced by the engine, exhaust, and tires. The level of traffic noise depends primarily on (1) the volume of traffic, (2) the speed of traffic, (3) the number of trucks in the flow of traffic, and (4) the distance between the traffic and

receptor site (such as a single family residence). In general, heavy traffic volumes, higher speeds, and greater numbers of trucks lead to more traffic noise. Conversely, the greater the distance between the traffic source and receptor, the lower the noise levels at the receptor site.

What types and heights of noise barriers are considered?

The types and locations of noise barriers generally considered include ground mounted and shoulder mounted. Ground mounted barriers are typically concrete post and panel noise walls and are usually constructed in the vicinity of the right of way line. Shoulder barriers are constructed along the outside edge of the road shoulder and typically are used on elevated sections because ground mounted noise barriers are often less effective in these areas. To effectively reduce traffic noise, ground mounted noise barrier heights typically range from 12 to 22 feet and shoulder mounted noise barriers typically range from 6 to 14 feet in height. Due to safety and constructability issues, the height of shoulder mounted barriers is limited to 14 feet, except on mechanically stabilized earth (MSE) walls, where they are limited to 8 feet. In addition, a design variance is required for shoulder mounted barriers taller than 8 feet on bridges.

FDOT's Typical Ground Mounted Noise Barrier



FDOT's Typical Shoulder Mounted Noise Barrier



Please contact us with your comments or questions:

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Update Fall 2005

Following the April 14th MPO meeting where a Locally Preferred Alternative was selected, the Federal Transit Administration (FTA) made significant revisions to the New Starts project evaluation process. The changes to New Starts include:

- ❑ A lower threshold for cost effectiveness. To receive a Recommended rating, a project's cost of Transportation System User Benefit (or TSUB) cannot exceed \$21.99 per user benefit hour.
- ❑ Projects that do not receive a Recommended rating will not be approved for advancement into Preliminary Engineering.
- ❑ A new method for calculating capital costs.
- ❑ Restructuring of the land use evaluation criteria.

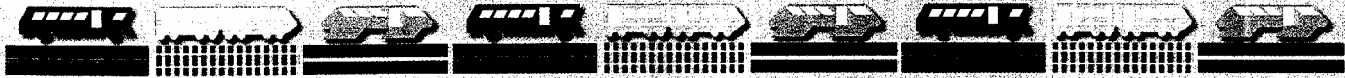
In May and June, FDOT coordinated with FTA to prepare an initial set of data and analysis for the LPA in order to be compatible with the revised New Starts guidance. A preliminary Minimum Operating Segment (MOS) was also defined and analyzed using the revised guidance. Based on these evaluations, neither the LPA nor the MOS met the new threshold to receive a Recommended rating.

On July 12, 2005, representatives from the Project Team met with FTA to review the LPA and MOS analyses. Based on the commitment from the Broward MPO and the Broward County Board of County Commissioners to both the project and the pursuit of transit funding, FTA agreed to be the lead agency in the preparation of a Draft Environmental Impact Statement (DEIS) for the project. The DEIS will provide an opportunity to:

- ❑ Identify station locations and develop station area plans that will improve the land use rating and produce higher ridership projections.
- ❑ Utilize the 2030 data for population and employment, as well as refinements to the transportation model (SERPM 6), which will result in higher ridership projections.
- ❑ Refine an MOS that would result in lower capital costs.
- ❑ Resolve alignment issues, such as:
 - Identifying alternatives to NW 136th Avenue
 - Determining the guideway configuration (elevated or at-grade) along SR 7 and Broward Boulevard



CENTRAL BROWARD EAST-WEST TRANSIT ANALYSIS



Newsletter Edition 4

The Broward Connection

Spring 2005

About the Project

The Central Broward East/West Transit Alternatives Analysis is being conducted by the Florida Department of Transportation (FDOT) to determine the most beneficial alignment and appropriate type of premium transit service for Central Broward County. The general boundaries of the study area are Oakland Park Boulevard to the north, Griffin Road to the south, the Weston/Sawgrass area to the west, and the Intracoastal Waterway to the east.

The origins of this analysis are the Broward County Metropolitan Planning Organization's Long Range Transportation Plan (LRTP) and the I-95/I-595 Master Plan. The MPO's LRTP defines a countywide network of premium transit, rapid bus and local bus services, including the need to evaluate the provision of a premium transit service in central Broward County. The I-95/I-595 Master Plan, which was coordinated with the LRTP, explored the feasibility of premium transit in the I-595 corridor and recommended that an alternatives analysis be undertaken. The MPO Board approved this recommendation and the study began in July 2002.

The analysis consists of four (4) distinct phases: Scoping, Tier 1 (Conceptual Definition of Alternatives), Tier 2 (Planning & Conceptual Engineering), and selection of a Locally Preferred Alternative (or LPA). The LPA will consist of the preferred alignment, possible station locations, and transit technology (e.g. light rail or bus rapid transit). The MPO has been involved with each phase, reviewing and commenting on the progress at each milestone. If the MPO and the Federal Transit Administration approve the LPA, the next step will be the Preliminary Engineering and Environmental Analysis phase of project development.

Project Update

In November 2004, the MPO approved an alignment from the Sunrise/Sawgrass area following along NW 136 Avenue and I-595, continuing north on State Road 7 and east on Broward Boulevard to Tri-Rail and Downtown Fort Lauderdale, continuing south on Andrews Avenue to the proposed Intermodal Center at the Fort Lauderdale/Hollywood International Airport (see map inside).

Following approval of the alignment, the Project Team began refining the capital and operating cost estimates and defining a recommended Locally Preferred Alternative (LPA). This edition of the newsletter highlights the information compiled for the recommended Locally Preferred Alternative.

Additionally, The Project Team is coordinating with the I-595 Project Development & Environment (PD&E) Study. The PD&E Study extends from I-75 to I-95 and evaluates alternatives of the LPA from the I-95/I-595 Master Plan. The roadway component consists of ramp and intersection improvements, modifications to SR 84, and reversible lanes. Each alternative provides a combination of concepts from the study process that best meet the overall transportation needs of this corridor.

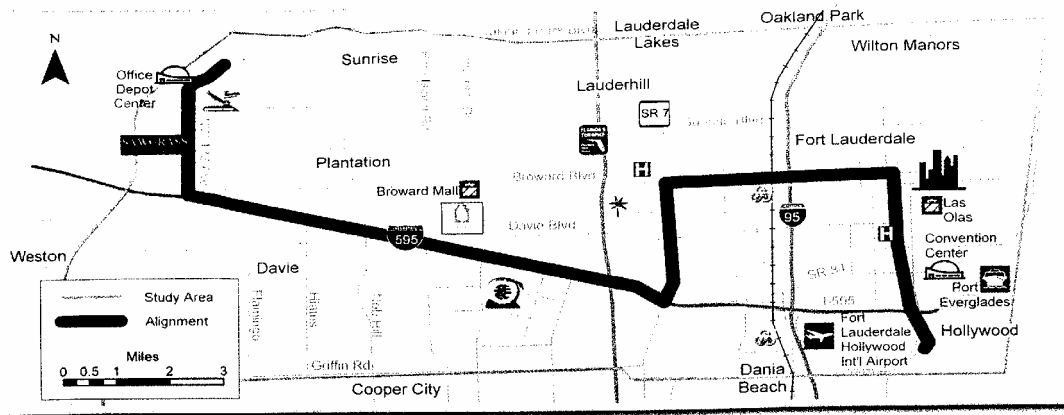
The I-595 PD&E and Central Broward East-West Transit Analysis teams are working together to develop a multimodal (automobile and transit) solution for the I-595 corridor that:

- Minimizes the need for additional right-of-way;
- Minimizes environmental impacts; and
- Maximizes the efficient use of funds.

For more information regarding the PD&E Study, please contact Steve Braun at the Florida Department of Transportation by phone at 954-777-4143, via e-mail at steve.braun@dot.state.fl.us or the project website at www.i-595.com

www.centralbrowardtransit.com

Approved Alignment



Alternative Choices

This spring, the MPO will be asked to make several key decisions related to this project. The MPO will need to decide between the No-Build, Enhanced Facilities and Services, and Recommended Build alternatives.

- The No-Build alternative means that no action is taken beyond existing plans.
- The Enhanced Facilities and Services is an alternative that represents the best that can be done to improve transit service in the corridor without a major capital investment. For this project, the Enhanced Facilities and Services alternative consists of three (3) express bus routes and park-and-ride facilities providing service from the Sunrise/Sawgrass area to Tri-Rail, Downtown and the Airport.
- The Recommended Build alternative consists of the approved alignment and a transit technology. The remaining decisions for this alternative are the transit technology and the location of the transit guideway within certain segments of the alignment (elevated or at the same level as the existing roadway). The technologies being considered are Bus Rapid Transit (BRT) or Light Rail Transit (LRT).

BRT can be constructed at a slightly lower capital cost and operated at a lower annual operating cost than LRT, at

least up until a certain point when the ridership demand makes LRT more efficient. The projected ridership is slightly higher for LRT.

Alternative	Projected 2025 Daily Ridership
Enhanced Facilities and Services	9,900
Bus Rapid Transit	14,900-16,400
Light Rail Transit	17,700-23,000

The location of the transit guideway varies depending upon the segment of the alignment. Along 136th Avenue, there appears to be ample right-of-way for dedicated, at-grade transit lanes on the west side of the road. The I-595 segment would have to be either in the median or elevated on the south side due to the numerous access ramps and interchanges. Along SR 7 and Broward Boulevard, the guideway could either be in the street or elevated. The alignment along Andrews Avenue would be in the street. The renderings on the opposite page show examples of what these guideway configurations might look like in these corridors.

Projected Capital Costs

The following table shows the projected capital costs for the Recommended Build Alternative, by alignment segment. The lower number generally reflects the cost for BRT and the

higher the cost for LRT, except along 136th Avenue, where the lower number is the cost for LRT.

Note: These cost estimates are subject to change.

Alignment Segment Costs (in millions)

Guideway Configuration Options	TRAVEL LANES EXISTING RIGHT-OF-WAY Exclusive At-grade	TRAVEL LANES EXISTING RIGHT-OF-WAY Exclusive Elevated	TRAVEL LANES EXISTING RIGHT-OF-WAY Shared	TRAVEL LANES EXISTING RIGHT-OF-WAY Exclusive Elevated (Median)	TRAVEL LANES EXISTING RIGHT-OF-WAY Exclusive At-grade (Median)
136 th Avenue	\$74.4-\$86.4				
I-595		\$395.5-\$472.5			
SR 7		\$68.9-\$89.9	\$14.3-\$44.4		
Broward Boulevard			\$34.5-\$85.4	\$197.5-\$232.2	
Andrews Avenue			\$32.6-\$64.0		
30 th & US 1					\$45.0-\$49.1
Total Costs: More Exclusive = \$882.7 - \$1,070.2 / More Shared = \$657.1 - \$869.5					

Guideway Options

Graphics depicting other guideway options and alignment segments can be viewed on the Documents page of the project website at www.centralbrowardtransit.com.



BRT in shared lane on SR 7



LRT in elevated guideway on Broward Blvd.



BRT in dedicated lane on 136th Ave.

What is Next?

If a Locally Preferred Alternative is selected by the MPO, the application to the Federal Transit Administration will be submitted in the summer of 2005. If the application is approved for Preliminary Engineering, this phase of the project may begin as early as Fall 2005. During this phase, station locations will be identified through coordination with local governments, an environmental document prepared, and the estimates of the project's costs, benefits and impacts will be identified with a higher degree of certainty.

Mr. Joseph Yesbeck, PE
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6363 NW 6 Way, Suite 300
Fort Lauderdale, Florida 33309

Who to Contact About the Study

This study is being conducted by the Florida Department of Transportation, District 4. Mr. Scott Seeburger is the Department's Project Manager. Mr. Seeburger is being assisted on this project by the consulting firm of Carter & Burgess. Mr. Joseph Yesbeck, P.E., is the project manager for Carter & Burgess. These individuals can be contacted as follows:

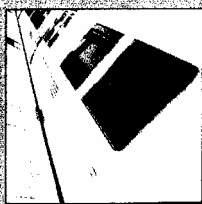
Mr. Scott Seeburger

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